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Mr. Kennard tells me '' that Children was the first Englishman to use '' Type '' as we do now ''.

It follows, therefore, that this was the earliest designation of a type for Ancylus and forecloses any further discussion on that point. Acroloxus Beek and Velletia Gray consequently fall into the synonymy of Ancylus.

Incidentally I would call attention to the fact that Geoffroy, to whom the genus *Ancylus* is usually credited, was not a binomial writer and, therefore, can not be recognized (see Dall, Harriman Alaska Expedition, XIII, 1905, p. 80, as to *Planorbis*). Ancylus should censequently be quoted as of Müller, 1774.

But this leaves the position of *fluviatilis* Müll. and its allies still to be determined. As I have already shown (*loc. cit.*) *Ancylastrum* Bgt. is not available and no other name has been suggested, I would, therefore, propose *Pseudancylus* as the generic name for the group with *Ancylus fluviatilis* Müll. as the type.

I am under great obligations to Dr. H. A. Pilsbry for the data in regard to Children's paper.

SOMETHING ABOUT ANGITREMA

CALVIN GOODRICH

In the Duck river at Centerville, Hickman co., Tenn., Dr. A. E. Ortmann last summer collected nearly 200 specimens of *Lithasia* (*Angitrema*) geniculata Hald., 1840, young and adult. About one-third of the material was typical geniculata, as it is known from the Cumberland river. The rest shaded from these forms into *Lithasia fuliginosa* (Lea), 1841, by scarcely perceptible gradations.

Farther up the river at Columbia, Maury eo., Dr. Ortmann took a second lot of these mollusks. Here the form *geniculata* was almost rare while *fuliginosa* was common. Yet examination showed them all to be of the same species.

The collections of Dr. Ortmann in the Harpeth river were equally as novel. At Belleview, Davidson eo., Tenn., most of the shells were of the form that appears in cabinets as Angitrema duttoniana (Lea), 1841. A single specimen was

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unmistakably adult, and that would be identified by anyone as Lithasia (Angitrema) armigera Say, 1821. Two specimens taken corresponded to what I have found recognized as Lithasia (Angitrema) venusta Lea, 1841. At Kingston Springs, Cheatham co., near the mouth of the river, armigera was collected in numbers. In addition was collected plentifully a Lithasia identical in shell characters with fuliginosa of the Duck river. A few only show the link with geniculata. A curious thing was the fact that all of these shells of the fuliginosa form, when banded, had the banding formula not of geniculata-fuliginosa, but of Lithasia obovata Say.

It is perhaps useful here to explain that though any given species of the *Pleuroceridae* may have several banding arrangements, yet in this given species will be found one formula which occurs many more times than any other, constituting a characteristic the perplexed student of this family feels he can be depend upon. Whether the Kingston Springs shells show a relationship between *geniculata* through *fuliginosa* to *obovata*, or blow this rule about banding formulas out of water, is for some one more competent than myself to decide.

On the findings of Dr. Ortmann, *fuliginosa* cannot be recognized as more important than a variety of *geniculata*. Under *Lithasia armigera* might be listed these subspecies:

Duttoniana (Lea), nearly smooth, or smooth, and having a prolonged basal sinus.

Angulata (Weth.), nearly smooth, or smooth, and lacking the prolonged sinus.

Parva (Weth.), a dwarf form, seemingly occurring with angulata.

Venusta (Lea).

Downiei Lea, 1881, possibly only a mutation of armigera.

The genus Angitrema, with chief character "shell spinous", was established by Haldeman in 1841, the type to be Melania armigera Say. Dr. Pilsbry ¹ reduced it to the position of a section under Lithasia. Even that leaves geniculata and armigera separated from some of their offspring. There seems to me to be no other course now than to eject Angitrema altogether.

1 Proc. Acad. Nat. Sciences, 1896, p. 496.